

ABSTRACT OF THE INVENTION

A system for hierarchically storing packetized data and transferring the packetized data includes an input configured to receive packets of data, a memory coupled to the input and configured to store packets of data, an output coupled to the memory and configured to transfer packets of data from the memory, and a controller coupled to the memory and configured to control the memory to store packets of data in queues associated with a hierarchy in which a first level of the hierarchy includes a group of queue group components, wherein at least one of the queue group components in the group at the first level includes a group of queue group components associated with a second level of the hierarchy that is different from the first level of the hierarchy.